STATE OF MARYLAND

DHMH

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September 24, 2010

Public Health & Emergency Preparedness Bulletin: # 2010:37
Reporting for the week ending 09/18/10 (MMWR Week #37)

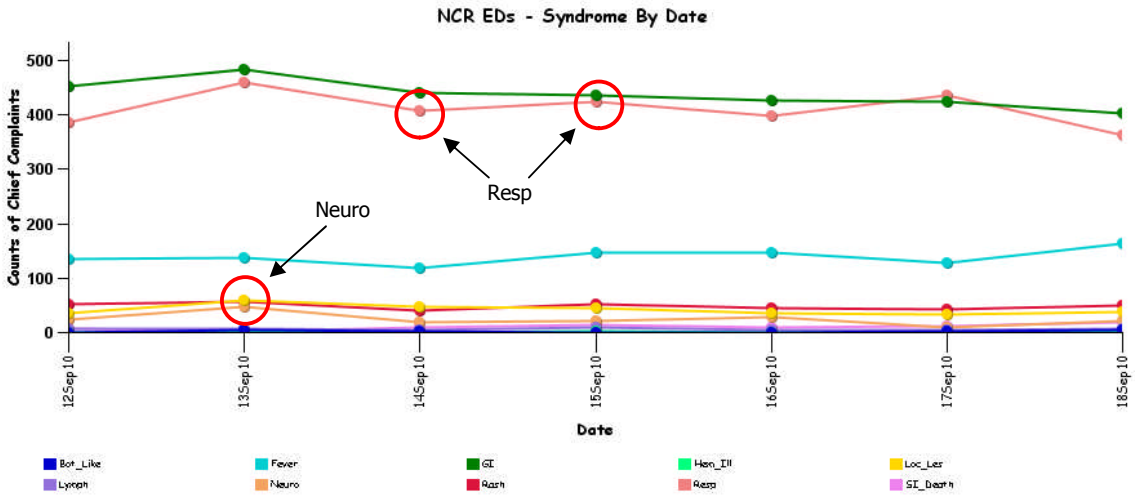
CURRENT HOMELAND SECURITY THREAT LEVELS

National: **Yellow (ELEVATED) *The threat level in the airline sector is Orange (HIGH)**
Maryland: **Yellow (ELEVATED)**

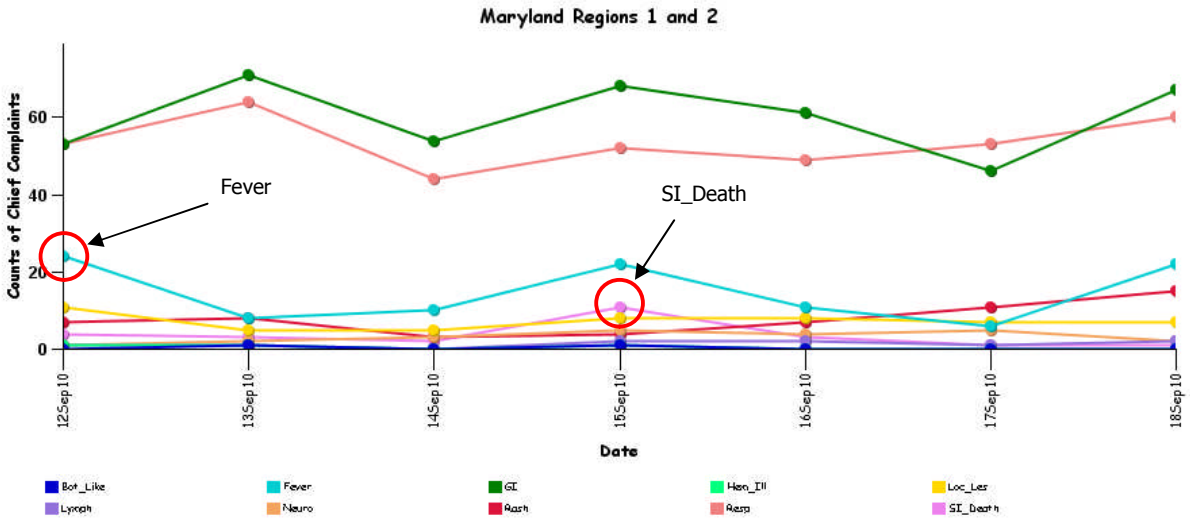
SYNDROMIC SURVEILLANCE REPORTS
ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Red alerts are generated when observed count for a syndrome exceeds the 99% confidence interval. Note: ESSENCE – ANCR Spring 2006 (v 1.3) now uses syndrome categories consistent with CDC definitions.

Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

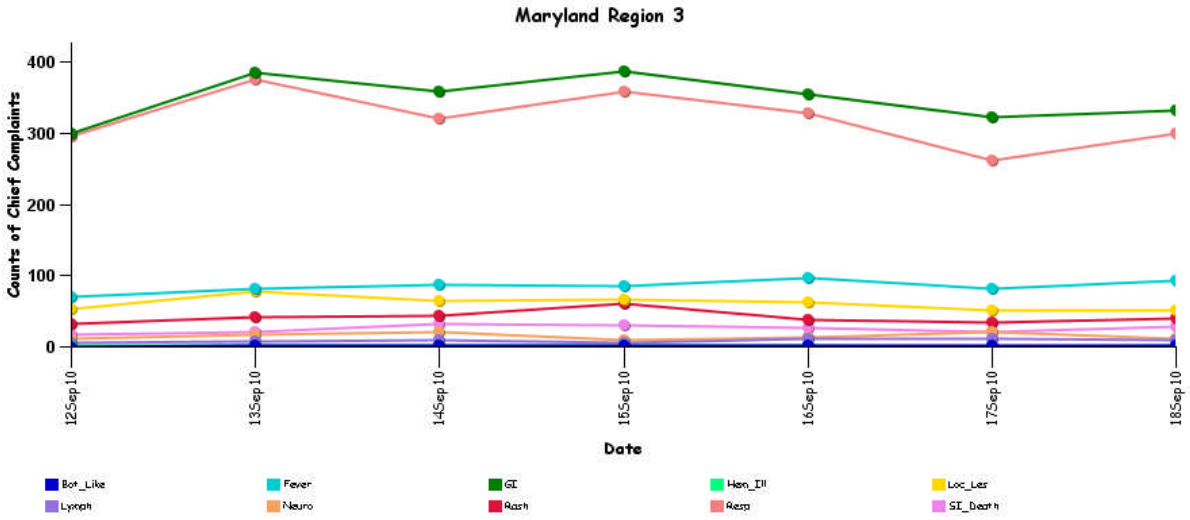
MARYLAND ESSENCE:



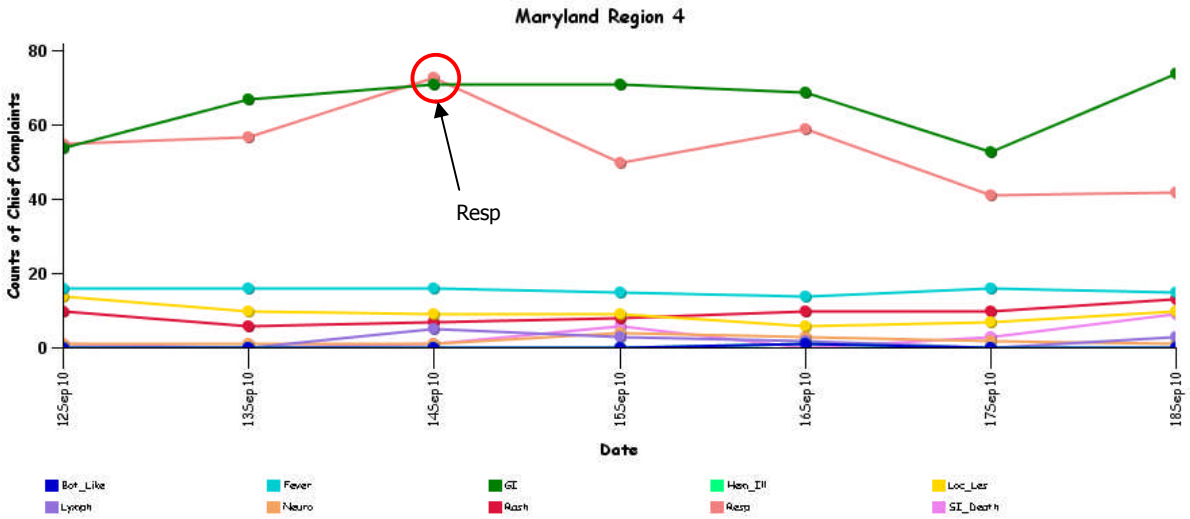
*Includes EDs in all jurisdictions in the NCR (MD, VA, and DC) reporting to ESSENCE



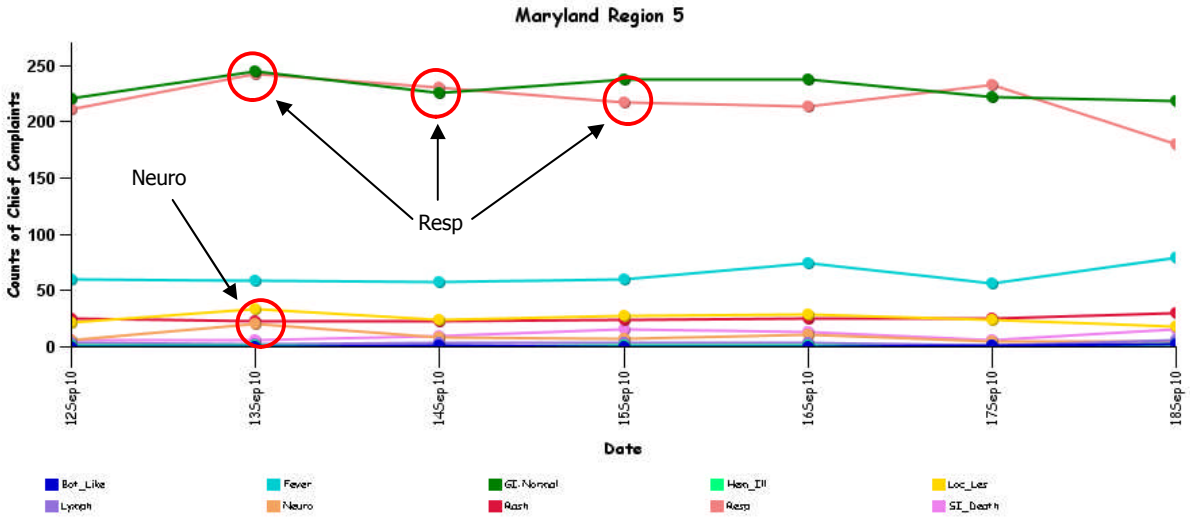
* Region 1 and 2 includes EDs in Allegany, Frederick, Garrett, and Washington counties reporting to ESSENCE



* Region 3 includes EDs in Anne Arundel, Baltimore City, Baltimore, Carroll, Harford, and Howard counties reporting to ESSENCE



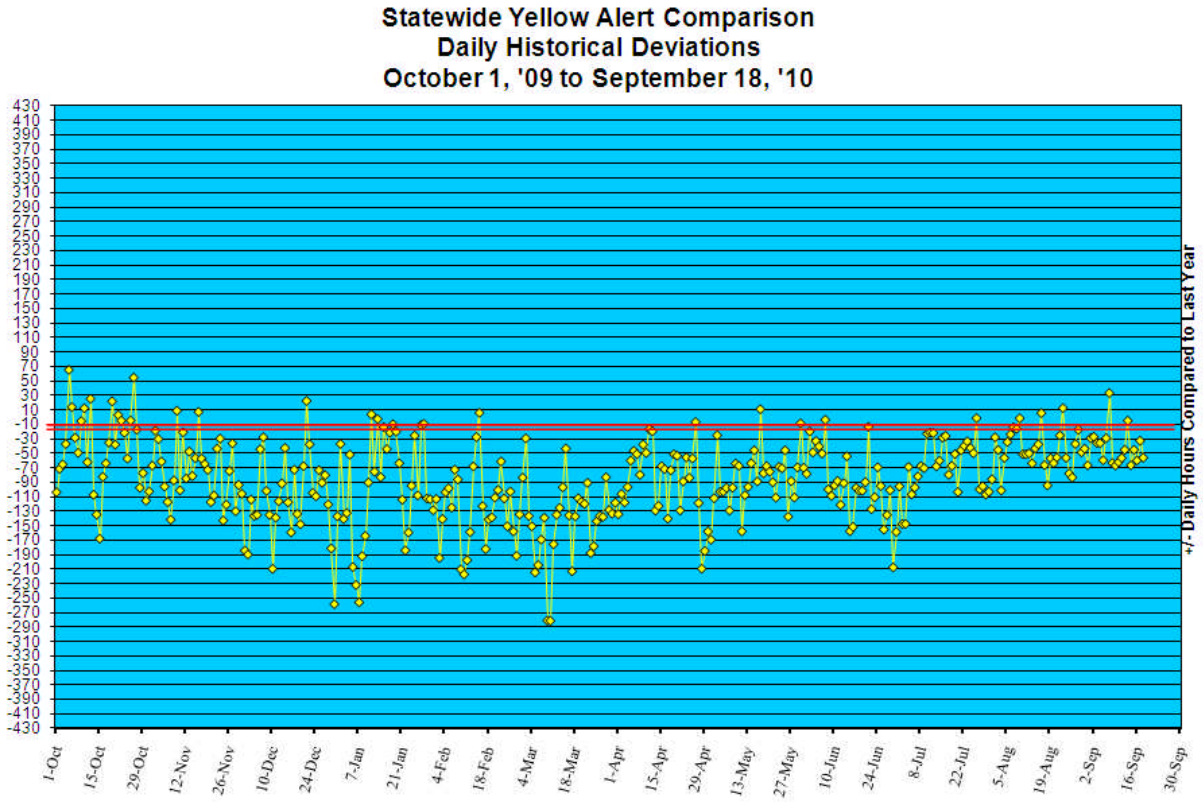
* Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE



* Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/09.



REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to an emerging public health threat for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in August 2010 did not identify any cases of possible public health threats.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	**Aseptic**	**Meningococcal**
New cases (September 12 – September 18, 2010):	28	0
Prior cases (September 5 – September 11, 2010):	21	0
Week#37, 2009 (September 13 – September 19, 2009):	15	0

3 outbreaks were reported to DHMH during MMWR Week 37 (September 12 - 18, 2010)

1 Gastroenteritis outbreak
1 outbreak of GASTROENTERITIS in a School

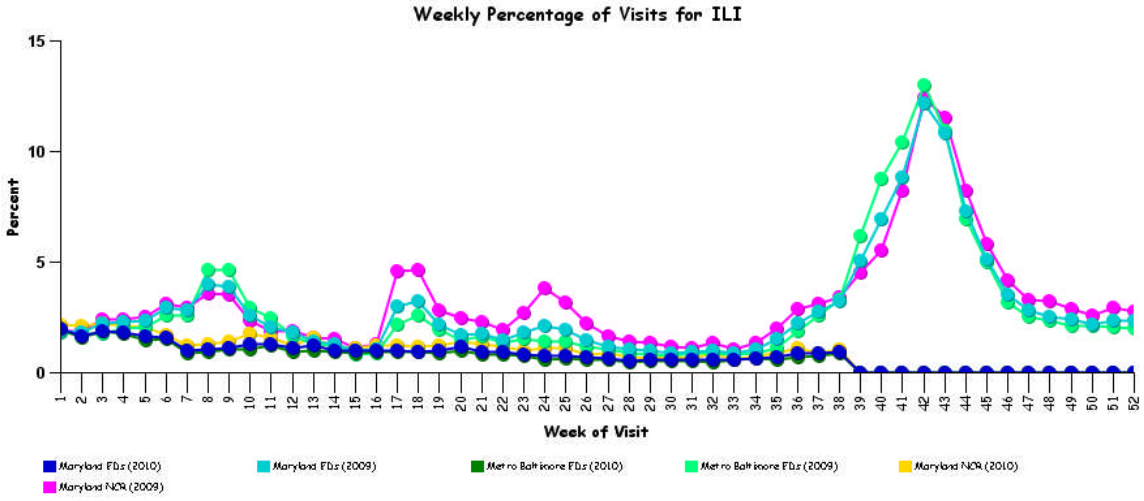
1 Foodborne gastroenteritis outbreak
1 outbreak of GASTROENTERITIS/FOODBORNE associated with a Restaurant

1 Respiratory illness outbreak
1 outbreak of PNEUMONIA in a Nursing Home

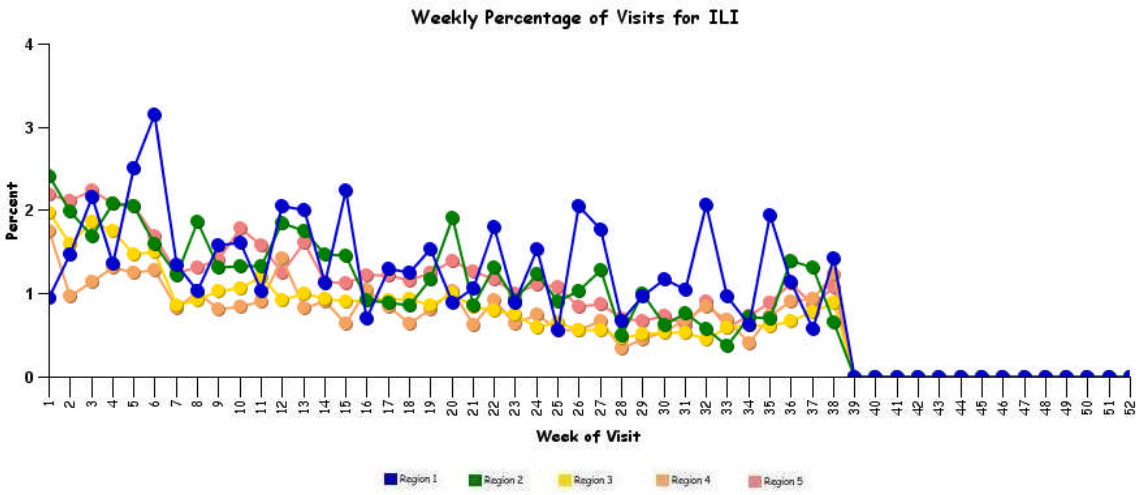
SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.



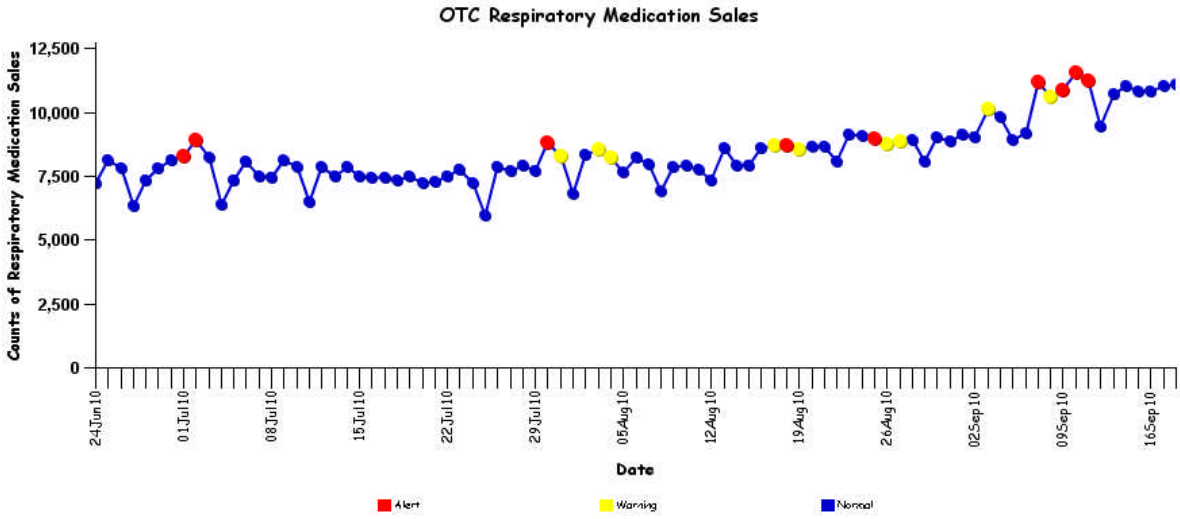
* Includes 2009 and 2010 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total



*Includes 2010 Maryland ED visits for ILI in Region 1, 2, 3, 4, and 5

OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.



AVIAN INFLUENZA-RELATED REPORTS:

WHO update: The current WHO phase of pandemic alert for avian influenza is 3.

In **Phase 3**, an animal or human-animal influenza reassortant virus has caused sporadic cases or small clusters of disease in people, but has not resulted in human-to-human transmission sufficient to sustain community-level outbreaks. Limited human-to-human transmission may occur under some circumstances, for example, when there is close contact between an infected person and an unprotected caregiver. However, limited transmission under such restricted circumstances does not indicate that the virus has gained the level of transmissibility among humans necessary to cause a pandemic.

As of August 31, 2010, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 505, of which 300 have been fatal. Thus, the case fatality rate for human H5N1 is about 59%.

H1N1 INFLUENZA (Swine Flu):

INFLUENZA PANDEMIC (H1N1) WHO UPDATE: As of 10 Sep 2010, influenza activity is currently most intense in the temperate areas of the southern hemisphere and southern Asia.

India is still experiencing a country-wide outbreak of H1N1 (2009) with active transmission and a substantial number of fatal cases in several states across the country.

Chile reported on a sharp increase in respiratory disease activity in the last 2 weeks. All age groups are affected, but the age groups below 65 years appear to be more affected than the older population. The level of activity in Chile in September 2010 is very unusual for this time of the year, as the country usually experiences a peak of respiratory disease in June and July. H1N1 (2009) virus has been the most commonly detected influenza virus so far this season, but in the recent weeks, there has been a shift towards influenza virus type B and influenza A (H3N2), with a decreasing proportion of H1N1 (2009) viruses. Respiratory syncitial virus transmission has also been widespread and intense, primarily affecting young children.

Australia has reported increasing influenza activity throughout August and September 2010, though recently the numbers of patients seen in emergency departments for influenza-like illness seem to have leveled off in parts of the country. Overall, influenza activity is well below the activity observed in the winter of 2009. The most commonly identified influenza virus in Australia is H1N1 (2009), though influenza type B is also being detected.

In New Zealand, influenza activity has decreased in the last week of August 2010, although activity is still well above baseline levels and with significant regional differences. The majority of influenza detections have been characterized as H1N1 (2009). Levels of influenza transmission in 2010 are below 2009 levels nationally but have exceeded 2009 in some localized areas of the country.
In Africa, the Central African Republic reported on their 1st ever detection of H1N1 (2009). South Africa observed a decrease in detection rate of influenza viruses in outpatients seen for respiratory disease for the 2nd week in a row. Influenza type B has been the most commonly detected influenza virus throughout this winter season [2010] in South Africa, though in recent weeks, the

proportion of H1N1 (2009) viruses has increased, and a small, decreasing number of influenza A (H3N2) continues to be detected.

Resources:

http://www.cdc.gov/h1n1flu/

http://www.dhmh.maryland.gov/swineflu/

NATIONAL DISEASE REPORTS:

There were no national disease reports for MMWR Week 37.

INTERNATIONAL DISEASE REPORTS:

JAPANESE ENCEPHALITIS AND OTHER (INDIA): 18 September 2010, Encephalitis claimed 5 lives in the district today [17 Sep 2010], taking the death toll in such cases in eastern Uttar Pradesh to 306 this year, a health official said. All the 5 patients died at the BRD Medical College Hospital here, Additional Director (Health) UK Srivastava said, adding that 25 new patients were admitted today [17 Sep 2010]. As many as 231 patients are presently undergoing treatment at the BRDMCH and other government hospitals, he said. (Viral encephalitis is listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

ANTHRAX, HUMAN, BOVINE (BANGLADESH): 15 September 2010, Anthrax cases among humans have so far spread to nearly 1/6th of the districts of Bangladesh since the south Asian country recorded the 1st virus-infected patient on 18 Aug 2010, official data showed Tuesday [14 Sep 2010]. The latest figures, released by Bangladesh's Institute of Epidemiology, Disease Control and Research (IEDCR) on its website on Tuesday, showed the disease spread to 10 out of 64 districts of the country. The IEDCR confirmed 13 new cases in the last 24-hours until Tuesday [14 Sep 2010] morning, bringing the total number of the infected people to 508. Following the quick spread of anthrax to more new districts, the Bangladeshi government last week announced a red-alert across the country and formed committees in all the 64 districts to coordinate all efforts of anthrax prevention and treatment. Mahmudur Rahman, chief of the IEDCR under the country's Ministry of Health and Family Welfare, had earlier said almost all the patients, who are suffering from cutaneous anthrax, have either consumed meats or come in contact with anthrax infected ill animals. (Anthrax is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

SALMONELLOSIS, SEROTYPE TYPHIMURIUM DT8 (IRELAND): 15 September 2010, The investigation into the current outbreak of salmonellosis linked with the consumption of duck eggs is ongoing, with 5 new cases in August 2010. The latest confirmed cases brings the total number to date to 24 and it is now the largest food poisoning outbreak of salmonellosis recorded in recent years in Ireland. In light of this, the Food Safety Authority of Ireland (FSAI) today, 14 Sep 2010, reiterated its advice on the safe consumption of duck eggs. The people infected have ranged from 5 months to 80 years of age. The latest cases tend to be linked with the consumption of duck eggs from small backyard flocks or private farms. The confirmed cases are nationwide. Hen eggs are not implicated in this outbreak. The FSAI has advised to only consume duck eggs that have been thoroughly cooked and to cease using raw duck eggs in any dishes that will not be cooked thoroughly prior to eating. It also cautions on the importance of good hygiene practices being followed, such as washing hands and preparation surfaces after handling or using duck eggs. Prof Alan Reilly, chief executive, FSAI said: "We are advising caterers, retailers, and consumers to treat duck eggs in the same way as they would raw chicken. We all know that we should never eat raw chicken. This is a risk that is well understood by everyone, both in terms of ensuring it is cooked thoroughly and also by maintaining good hygiene practices, thereby preventing cross contamination between raw food and ready-to-eat food." He continued: "However, people may have forgotten that duck eggs have been associated with Salmonella in the past and therefore, are not taking the correct precautions today. The fact that the outbreak is ongoing, underlines the huge importance attached to maintaining stringent hygiene practices when handling raw duck eggs. Even when duck eggs look clean, they may still have salmonellae on the outside of the shell and sometimes carry it on the inside of the egg." "The symptoms of Salmonella [enteric serotype] Typhimurium DT8 infection vary from mild discomfort due to vomiting and diarrhea, to life threatening illness. Infants, pregnant women, the frail elderly, and the sick are most at risk from food poisoning. Anyone who may have these symptoms and suspects it may have been from recently eating duck eggs should contact their doctor for advice," added Prof Reilly. The FSAI is working in collaboration with the Department of Agriculture, Fisheries and Food on control measures for commercial flocks and also smaller backyard flocks on private farms. A code of practice has been published for commercial flock owners and also guidelines have been published for producers of small quantities of duck eggs from backyard flocks. Work is also underway by Bord Bia [Irish Food Board] to develop a new quality assurance scheme to ensure a safe source of duck eggs in the future. The FSAI is continuing to work closely with the Health Protection Surveillance Centre; the Department of Agriculture, Fisheries and Food; and various local authorities to control this outbreak and to prevent further cases of illness. (Food Safety Threats are listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

ANTHRAX, HUMAN, EQUINE (RUSSIA): 14 September 2010, About 200 tons of convenience foods that might contain anthrax bacillus will be disposed of in Russia's cities of Omsk, Khanty-Mansiisk, Tver, Surgut, and others. Chief sanitarian doctor for Russia's Omsk region Alexander Kriga on Monday [13 Sep 2010] ordered [the disposal] of more than 195 tons of meat-stuffed convenience foods produced in the period from 13 Jul through 6 Aug 2010 by the Darina company and 2 more private enterprises. The companies used horse meat bought from the Aitenov farm, where anthrax cases were reported among horses. Moreover, 6 farm workers were reported to catch the disease, and one of them died. According to Kriga, subject to disposal will also [cover] prepared foods made from meats other than horse meat but manufactured within the same time span and with the use of the same equipment. "Practically all our resolutions are challenged at courts but the claimants lose every one of them," he noted. (Anthrax is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

OTHER RESOURCES AND ARTICLES OF INTEREST:

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://preparedness.dhmh.maryland.gov/

Maryland's Resident Influenza Tracking System: www.tinyurl.com/flu-enroll

CDC Grand Rounds: Radiological and Nuclear Preparedness MMWR 59(36);1178-1181
This article discusses the risks associated with radiological and nuclear threats, as well as the necessary steps required to ensure proper preparedness should a radiological or nuclear event occur. Current state and local capabilities to respond effectively to radiological or nuclear incidents vary; therefore, this article explains the need for public health agencies, laboratories, etc. at all levels of government to understand the extent of their responsibilities in radiological or nuclear emergencies so that they can prepare for and respond to these incidents properly. http://www.cdc.gov/mmwr/mmwr_wk/wk_cvol.html

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NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

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